"Scoliosis Uncovered: Delving into the Depths of Spinal Curvature"



June, the month dedicated to raising awareness about scoliosis, is an opportune time to shed light on the lives of famous individuals like Usain Bolt, Hrithik Roshan, and Malayalam movie star Mohanlal who have faced the challenges of this spinal condition with unwavering determination. Despite their scoliosis diagnoses, these remarkable personalities have not only conquered their physical limitations but have also found immense success and happiness in their chosen paths.

Explore our blog to learn more about the interesting details of scoliosis and to access the unseen tales and priceless insights that are hidden within.

What is **Scoliosis**?

Scoliosis is a lateral curvature of the spine that is typically diagnosed in adolescence.

The curve's angle could be modest, big, or somewhere in the middle. On an X-ray, however, anything that measures higher than 10 degrees is classified as scoliosis. The curve may be denoted by the letters "C" and "S" by physicians. Any portion of the spine can be curved, but the upper spine and lower back are most commonly affected.

Most of the time, the person does not require treatment because the curve frequently does not advance significantly. Doctors may advise a mix of back bracing and physical therapy, though it will depend on the child's age, the degree of curvature, and other factors. Scoliosis patients may require surgery in a very tiny percentage of cases. Chronic pain, respiratory problems, and a decreased ability to exercise are all potential side effects of scoliosis.

How is Scoliosis Diagnosed?

Typically, idiopathic scoliosis is first discovered during a typical paediatric checkup or school screening, or perhaps a parent or teacher just happens to observe and comment on the potential sideways curvature of

the spine. X-ray verification of the aberrant lateral curvature and spinal rotation is necessary for the determination of an official diagnosis of idiopathic scoliosis.

Adam's Forward Bend Test

The first step toward getting an idiopathic scoliosis diagnosis is typically the Adam's forward bend test, which primarily looks for abnormal spine rotation.

During this test, the patient must bend forward at the waist 90 degrees while keeping their knees straight and their arms extended towards the floor. From this position, it is easy to see the majority of scoliosis **symptoms** that manifest as asymmetry in the spine and/or body trunk, including:

- The heights of the shoulders are not equal.
- A rib hump, commonly referred to as a rib cage that projects more from one side,
- one hip appearing higher or more prominent than the other
- The waist appears out of level.
- The upper body leans to one side.
- One leg could be shorter than the other.

The Adam's forward bend test can be effective in identifying idiopathic scoliosis, which typically affects the upper or middle back. The forward bend test does not require rib rotation, hence it is less useful at identifying scoliosis in the low back.

Scoliosis treatment options

Once your scoliosis has been identified, an orthopaedic physician will be recommended to you. Together, you will decide the best course of action for treating your curved spine.

Your age, the kind of scoliosis you have, how much your back curves, and any underlying medical concerns will all affect how your disease is treated. The doctor will consider how much more likely it is that the patient will grow, especially in children.

They will also take into account any symptoms you may be experiencing, like as discomfort, restricted body movement, and breathing difficulties, which may be brought on by severe curvature. There are three types of scoliosis treatments available to you:

- Bracing
- Observation
- Surgery

Bracing:

A back brace may be advised by the doctor if the curve ranges in angle from 20 to 40 degrees in order to slow the curve's growth as the child gets older.

There are different varieties of braces are available

Depending on how severe and where the curvature is, the child will require a certain form of brace

1 Hard plastic Brace: Hard plastic may be used to make braces. These may remain inflexible.

Conventional rigid-type scoliosis braces may have a number of adverse effects, including the possibility of rib fractures, muscle weakening, breathlessness, confidence loss, and depression. These braces may not fit for very long and may result in hygiene issues because the majority of scoliosis patients are teenagers who are still developing.

2 Hybrid Brace:- The world's first wearable hybrid scoliosis brace, called Spinamic, was created by VNTC, a MedTech business, and it combines the advantages of both traditional rigid and soft-type braces. Patients with minor scoliotic symptoms and those with neuromuscular diseases who have trouble wearing hard plastic braces can both benefit from Spinamic.

By reducing uncomfortable side effects and psychological stress associated with traditional rigid braces, Spinamic enhances patients' quality of life without sacrificing the therapeutic benefits of rigid braces.

Observation:-

Children with backbone curves less than 20 degrees will be monitored by doctors. The curve may remain the same during puberty or worsen as the child's body changes.

Surgery:-

Curves between 45 and 50 degrees are typically anticipated to worsen and may possibly have an impact on how the lungs function. In situations like this, your doctor might advise spinal fusion surgery because it has been demonstrated to stop the growth of curves.

Conclusion:

As we conclude our exploration of scoliosis, we are inspired by the stories of extraordinary individuals who have faced and overcome this condition. By understanding how scoliosis is diagnosed and the different treatment options available, we can support and empower those affected. Remember, knowledge is key in raising awareness and fostering a world where everyone can live a fulfilling life, irrespective of scoliosis. Let us continue to spread compassion and understanding, breaking down barriers and embracing a future where the challenges of scoliosis are met with resilience and happiness.